

SQN Series Compact Cylinder

SQN Compact Cylinder



Specifications

Bore(mm)	12	16	20	25	32	40	50	63	80	100
Acting type	Double Acting/Single Acting									
Working medium	Clean Air(40 μm filtration)									
Working pressure(MPa)	0.1~1.0(Double acting) / 0.2~1.0(Single acting)									
Garanteed pressure(MPa)	1.5									
Working temperature(°C)	-20~80(No freezing)									
Speed range(mm/s)	30~500									
Cushion type	Rubber cushion									
Port size	M5 x 0.8			G1/8 ①			G1/4 ①		G3/8 ①	

① PT、NPT port size is optional.

How to Order?

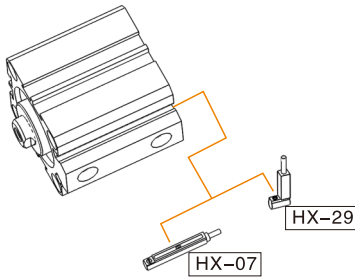
Series No	Type No	Bore	X	Stroke	Adjustable Stroke	Magnet No	Piston Rod Thread Type	Thread Type	Optional Accessorie
SQN	Blank: Basic type D: Double shaft type J: Double shaft and adjustable stroke type SA: Single acting spring extend SB: Single acting spring return	12 16 20 25 ...		5 10 15 ...	10 20 30 40 50	Blank: No magnet S: With magnet	Blank: Female thread M: Male thread	Blank: G P: PT T: NPT	FA (Only Φ32 ~ Φ100)

Order Example:

SQN Series single acting spring extend cylinder, 40mm bore, 30mm stroke, with magnet, femal thread on piston rod, G thread.

ERP code is: SQNSA40X30-S

Optional Accessories



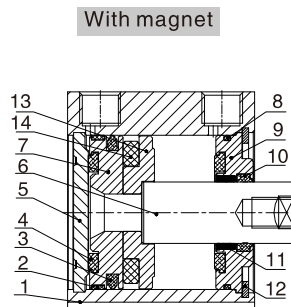
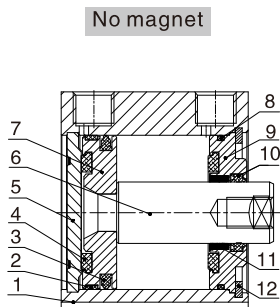
Note: Short stroke please use HX-29 series due to limited space.

Stroke

	Bore (mm)	Standard Stroke (mm)										Max. Str										
		5	10	15	20	25	30	35	40	45	50											
Double Acting	12/16	5	10	15	20	25	30	35	40	45	50	50										
	20/25	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	110	120	130	140	150	150
	32~100	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100						100
Single Acting	12/16	5	10	15	20							20										
	20~63	5	10	15	20	25	30					30										

Note: The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder. e.g. 27mm stroke cylinder has the same dimensions of 30 std. stroke cylinder. When ordering stroke is larger than the maximum stroke, please contact us.

Internal Structure

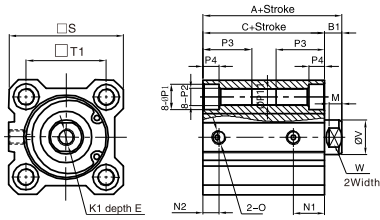


No	Part Name
1	Barrel
2	Wear ring
3	Piston seal
4	Anti-bump cushion
5	Rear cover
6	Piston rod
7	Piston
8	integrated magnet
9	Head cover
10	Piston rod seal
11	Self lubricating bearing
12	C type retainer ring
13	Magnet
14	Magnet base

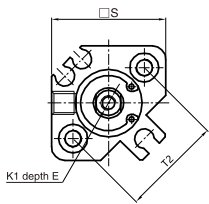
SQN Series Compact Cylinder

Main Dimension

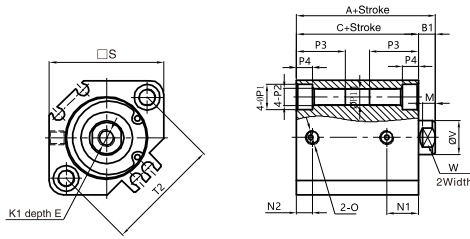
SQN $\Phi 12-\Phi 25$ (No magnet)



SQN $\Phi 12$ (With magnet)

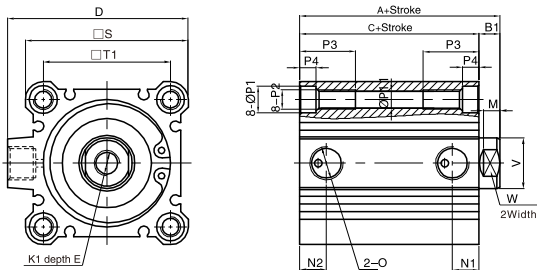


SQN $\Phi 16-\Phi 25$ (With magnet)



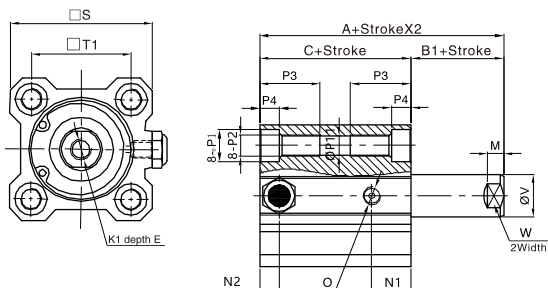
Model	Basic Type								With Magnet										
	Sign	A				C				N1	N2	A	C	N1	N2	B1	D	E	M
		St ≤ 50	St ≥ 60	St ≤ 50	St ≥ 60	N1	N2	A	C										
12	20.5	-	17	-	7.5	5	31.5	28	9	5	3.5	-	6	3.5					
16	22	-	18.5	-	8	5.5	34	30.5	9.5	5.5	3.5	-	8	3					
20	24	34	19.5	29.5	9	5.5	36	31.5	9.5	5.5	4.5	-	7	4					
25	27.5	37.5	22.5	32.5	11	5.5	37.5	32.5	11	5.5	5	-	12	4.5					
Bore/Sign	K1	O	P1	P11	P2		P3	P4	S	T1	T2	V	W						
12	M3x0.5	M5x0.8	6	3.4	M4x0.7		11	3.5	25	15.5	22	6	5						
16	M4x0.7	M5x0.8	6	3.4	M4x0.7		11	3.5	29	20	28	8	6						
20	M5x0.8	M5x0.8	9	5.5	M6x1.0		17	5.5	36	25.5	36	10	8						
25	M6x1.0	M5x0.8	9	5.5	M6x1.0		17	5.5	40	28	40	12	10						

SQN $\Phi 32-\Phi 100$

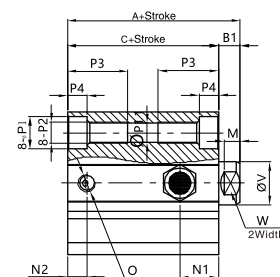


Model	Basic Type								With Magnet							
	Sign	A		C		N1	N2	A	C	N1	N2	B1	D	E	M	
		St ≤ 50	St ≥ 60	St ≤ 50	St ≥ 60											
32	St=5	30	40	23	33	7.5	6.5	40	33	10.5	7.5	7	49.5	13	6	
	St>5					10.5	7.5									
40		36.5	46.5	29.5	39.5	11	8	46.5	39.5	11	8	7	57	13	6	
50	St=5	38.5	48.5	30.5	40.5	9	9	48.5	40.5	10.5	10.5	8	71	15	6.5	
	St>5					10.5	10.5									
63	St=5	44	54	36	46	14	9.5	54	46	15	10.5	8	84	15	6.5	
	St>5					15	10.5									
80		53.5	63.5	43.5	53.5	16	14	63.5	53.5	16	14	10	104	20	8.5	
100		65	75	53	63	20	17.5	75	63	20	17.5	12	123.5	26	9.5	
Bore/Sign	K1	O	P1	P11	P2		P3	P4	S	T1	T2	V	W			
32	M8x1.25	1/8"	9	5.5	M6x1.0		17	5.5	45	34	-	16	14			
40	M8x1.25	1/8"	9	5.5	M6x1.0		17	5.5	52	40	-	16	14			
50	M10x1.5	1/4"	10.5	6.6	M8x1.25		22	6.5	64	50	-	20	17			
63	M10x1.5	1/4"	14	9	M10x1.5		28.5	9	77	60	-	20	17			
80	M16x2.0	3/8"	17	11	M12x1.75		35.5	11	98	77	-	25	22			
100	M20x2.5	3/8"	17	11	M12x1.75		35.5	11	117	94	-	32	27			

SQNSA $\Phi 12-\Phi 25$ (No magnet)



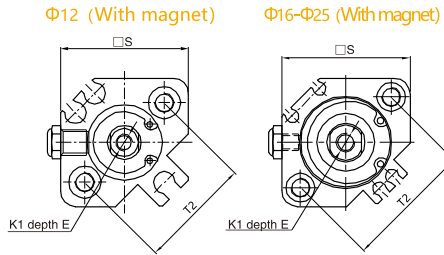
SQSB $\Phi 12-\Phi 25$ (No magnet)



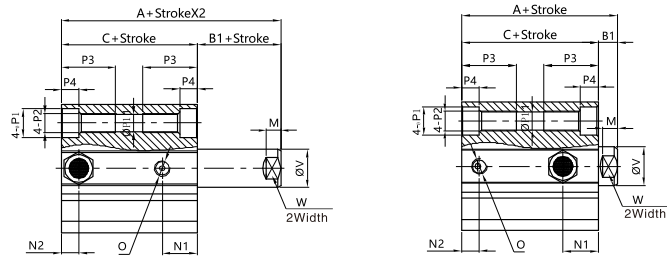
SQN Series Compact Cylinder

Main Dimension

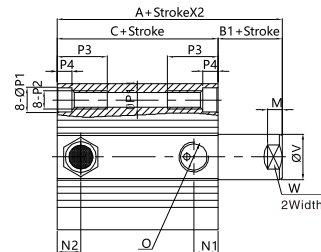
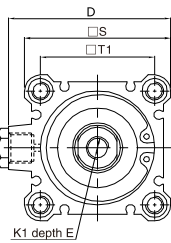
SQNSA $\Phi 12-\Phi 25$ (With magnet)



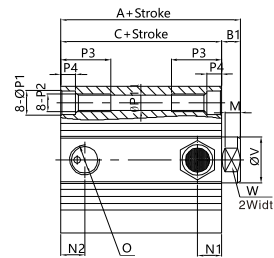
SQNSB $\Phi 12-\Phi 25$ (With magnet)



SQNSA $\Phi 32-\Phi 63$



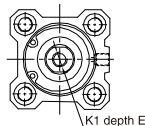
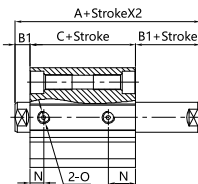
SQNSB $\Phi 32-\Phi 63$



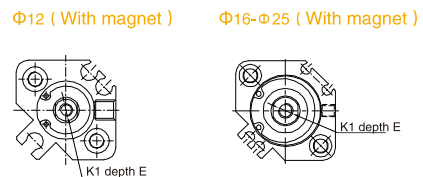
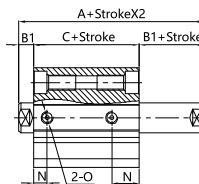
Model	Basic Type										
	A			C			N1	N2	B1	D	E
Bore / Sign	5/10	15/20	25/30	5/10	15/20	25/30					
Stroke	5/10	15/20	25/30	5/10	15/20	25/30	N1	N2	B1	D	E
12	25.5	30.5	-	22	27	-	7.5	5	3.5	-	6
16	27	32	-	23.5	28.5	-	8	5.5	3.5	-	8
20	29	34	39	24.5	29.5	34.5	9	5.5	4.5	-	7
25	32.5	37.5	42.5	27.5	32.5	37.5	11	5.5	5	-	12
32	35	40	45	28	33	38	10.5	7.5	7	49.5	13
40	41.5	46.5	51.5	34.5	39.5	44.5	11	8	7	57	13
50	48.5	53.5	58.5	40.5	45.5	50.5	10.5	10.5	8	71	15
63	54	59	64	46	51	56	15	10.5	8	84	15
Bore / Sign	O	P1	P11	P2	P3	P4					
12	M5x0.8	6	3.4	M4x0.7	11	3.5					
16	M5x0.8	6	3.4	M4x0.7	11	3.5					
20	M5x0.8	9	5.5	M6x1.0	17	5.5					
25	M5x0.8	9	5.5	M6x1.0	17	5.5					
32	1/8"	9	5.5	M6x1.0	17	5.5					
40	1/8"	9	5.5	M6x1.0	17	5.5					
50	1/4"	10.5	6.6	M8x1.25	22	6.5					
63	1/4"	14	9	M10x1.5	28.5	9					

Model	Basic Type										K1				
	A			C			N1	N2	M	S		T1	T2	V	W
Bore / Sign	5/10	15/20	25/30	5/10	15/20	25/30									
Stroke	5/10	15/20	25/30	5/10	15/20	25/30	N1	N2	M	S	T1	T2	V	W	
12	36.5	41.5	-	33	38	-	9	5	M3x0.5	3.5	25	15.5	22	6	5
16	39	44	-	35.5	40.5	-	9.5	5.5	M4x0.7	3	29	20	28	8	6
20	41	46	51	36.5	41.5	46.5	9.5	5.5	M5x0.8	4	36	25.5	36	10	8
25	42.5	47.5	52.5	37.5	42.5	47.5	11	5.5	M6x1.0	4.5	40	28	40	12	10
32	45	50	55	38	43	48	10.5	7.5	M8x1.25	6	45	34	-	16	14
40	51.5	56.5	61.5	44.5	49.5	54.5	11	8	M8x1.25	6	52	40	-	16	14
50	58.5	63.5	68.5	50.5	55.5	60.5	10.5	10.5	M10x1.5	6.5	64	50	-	20	17
63	64	69	74	56	61	66	15	10.5	M10x1.5	6.5	77	60	-	20	17
Bore / Sign	M	S	T1	T2	V	W									
12	3.5	25	15.5	22	6	5									
16	3	29	20	28	8	6									
20	4	36	25.5	36	10	8									
25	4.5	40	28	40	12	10									
32	6	45	34	-	16	14									
40	6	52	40	-	16	14									
50	6.5	64	50	-	20	17									
63	6.5	77	60	-	20	17									

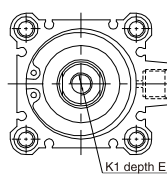
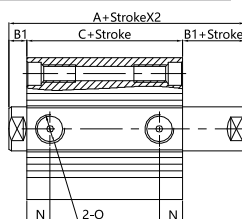
SQND $\Phi 12-\Phi 25$ (No magnet)



SQND $\Phi 12-\Phi 25$ (With magnet)



SQND $\Phi 32-\Phi 100$



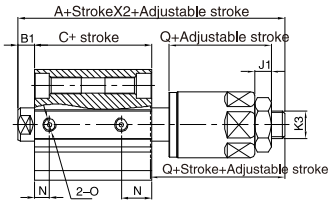
Bore / Sign	A		C		B1	E	N
	Standard	With magnet	Standard	With magnet			
12	32.2	39.4	25.2	32.4	3.5	6	9
16	33	43	26	36	3.5	8	9.5
20	35	47	26	38	4.5	7	9.5
25	39	49	29	39	5	9.5(St=5)/12(St>5)	11
32	44.5	54.5	30.5	40.5	7	9(St=10)/13(St>10)	10
40	54	64	40	50	7	11(St=10)/13(St>10)	13
50	56.5	66.5	40.5	50.5	8	12(St=10)/15(St>10)	13.5
63	58	68	42	52	8	12(St=10)/15(St>10)	16
80	71	81	51	61	10	14(St=15)/20(St>15)	16
100	84.5	94.5	60.5	70.5	12	20(St=25)/26(St>25)	21

Note: Not marked dimensions is same as standard type. Male thread type pls check this page.

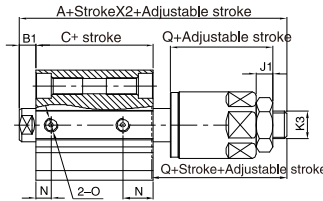
SQN Series Compact Cylinder

Main Dimension

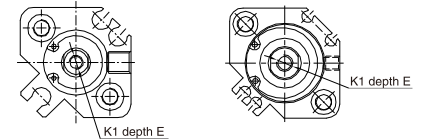
SQNJ Φ 12- Φ 25(No magnet)



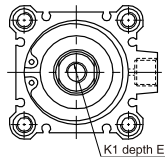
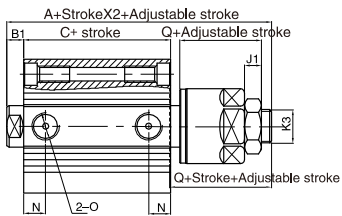
SQNJ Φ 12- Φ 25(With magnet)



Φ 12 With magnet Φ 16- Φ 25 With magnet

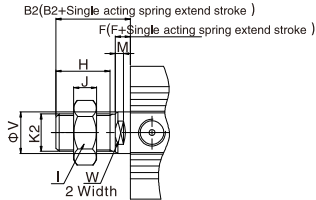


SQNJ Φ 32- Φ 100



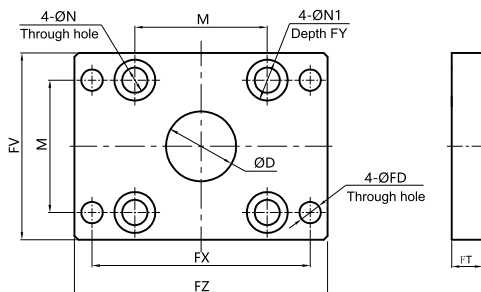
Bore /Sign	A		C		B1	E	N	Q	J1	K3
	Standard	With magnet	Standard	With magnet						
12	45.2	52.4	25.2	32.4	3.5	6	9	17	4	M5x0.8
16	50	60	26	36	3.5	8	9.5	21	5	M6x1.0
20	55	67	26	38	4.5	7	9.5	25	6	M8x1.25
25	61.5	71.5	29	39	5	9.5(St=5)/12(St>5)	11	28	6	M10x1.25
32	67	77	30.5	40.5	7	9(St≤10)/13(St>10)	10	30	8	M14x1.5
40	75.5	85.5	40	50	7	11(St≤10)/13(St>10)	13	29	8	M14x1.5
50	80.5	90.5	40.5	50.5	8	12(St≤10)/15(St>10)	13.5	32	11	M18x1.5
63	82	92	42	52	8	12(St≤10)/15(St>10)	16	32	11	M18x1.5
80	97.3	107.3	51	61	10	14(St≤15)/20(St>15)	16	37	13	M22x1.5
100	106.5	116.5	60.5	70.5	12	20(St≤25)/26(St>25)	20	37	13	M26x1.5

Male type dimension



Bore /Sign	B2	F	H	I	J	K2	M	V	W
12	14	3.5	9	8	4	M5x0.8	3.5	6	5
16	15.5	3.5	10	10	5	M6x1.0	3	8	6
20	18.5	4.5	12	12	6	M8x1.25	4	10	8
25	22.5	5	15	17	6	M10x1.25	4.5	12	10
32	28.5	5	20.5	19	8	M14x1.5	4	16	14
40	28.5	5	20.5	19	8	M14x1.5	4	16	14
50	33.5	5	26	27	11	M18x1.5	4	20	17
63	33.5	5	26	27	11	M18x1.5	4	20	17
80	43.5	8	32.5	32	13	M22x1.5	6	25	22
100	43.5	8	32.5	36	13	M26x1.5	5.5	32	27

FA



Bore/Sign	M	N	N1	FD	FT	FV	FX	FY	FZ	D	Matching screws (Short head hexagon socket head screw)
SQN32-FA	34	6.5	10.5	5.5	8	48	56	4.3	65	20	GSH6X16B(Black)X4
SQN40-FA	40	6.5	10.5	5.5	8	54	62	4.3	72	20	GSH6X16B(Black)X4
SQN50-FA	50	8.5	13.5	6.5	9	67	76	5.3	89	25	GSH8X16B(Black)X4
SQN63-FA	60	10.5	16.5	9	10	80	92	6.3	108	25	GSH10X20B(Black)X4
SQN80-FA	77	12.5	18.5	11	12	99	116	7.5	134	30	GSH12X25B(Black)X4
SQN100-FA	94	12.5	18.5	11	12	117	136	7.5	154	40	GSH12X25B(Black)X4

Note: Surface treatment: Shot blasting-Electrophoresis (black)